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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,940	01/17/2001	Brian Thornton	BT5302	6173
71555 SPEED LAW I	7590 11/08/2007 FIRM		EXAMINER	
111 CENTER STREET			GANEY, STEVEN J	
SUITE 1200 LITTLE ROCH	K, AR 72201		ART UNIT PAPER NUMBER	
			3752	
			MAIL DATE	DELIVERY MODE
			11/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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=		Application No.	Applicant(s)				
		09/761,940	THORNTON, BRIAN				
÷	Office Action Summary	Examiner	Art Unit				
		Steven J. Ganey	3752				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet	with the correspondence address				
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING DISTRICT STATES AND THE MAILING DEPLIES AND THE M	DATE OF THIS COMMUN 136(a). In no event, however, may will apply and will expire SIX (6) MO te, cause the application to become	IICATION.  a reply be timely filed  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 06 A	August 2007.					
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposit	on of Claims						
4)⊠	4)⊠ Claim(s) <u>16-18 and 21-37</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	S) Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>16-18 and 21-37</u> is/are rejected.						
7)	Claim(s) is/are objected to	•					
8)	Claim(s) are subject to restriction and/	or election requirement.					
Applicat	ion Papers		• .				
9)	The specification is objected to by the Examin	er.					
10)	The drawing(s) filed on is/are: a) ac	cepted or b)  objected t	b by the Examiner.				
	Applicant may not request that any objection to the	e drawing(s) be held in abey	ance. See 37 CFR 1.85(a).				
_	Replacement drawing sheet(s) including the correct	•	-				
11)	The oath or declaration is objected to by the E	Examiner. Note the attach	ed Office Action or form PTO-152.				
Priority (	under 35 U.S.C. § 119		•				
, —	Acknowledgment is made of a claim for foreig  All b) Some * c) None of:		§ 119(a)-(d) or (f).				
	<ol> <li>Certified copies of the priority documer</li> <li>Certified copies of the priority documer</li> </ol>		Application No				
	3. Copies of the certified copies of the priority						
	application from the International Burea						
* (	See the attached detailed Office action for a lis		ot received.				
Attachmer	nt(s)						
	ce of References Cited (PTO-892)	4) Interview	v Summary (PTO-413)				
2) Notice 3) Information	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 4/9/07.	Paper N	o(s)/Mail Date f Informal Patent Application				

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#### **DETAILED ACTION**

1. Receipt is acknowledged of the amendment filed on August 6, 2007, which has been fully considered in this action.

### Terminal Disclaimer

2. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

# **Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 16, 21, 30 and 32 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 21 and 34 of copending Application No. 11/319,114. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim a dispenser having a tee connector having a lower chamber, a cylinder forming an upper chamber, an upstream opening, a downstream opening, and first and second electrically powered valves. The claims of the instant invention are broader in scope than claims 21 and 34 of copending Application No. 11/319,114 and are encompassed in claims 21 and 34.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, there is an inconsistency between the language in the preamble, which recites an apparatus, and body of the claims, which also positively recites "disposed within an irrigation system". This makes the scope of the claim unclear since it appears to be reciting the subcombination of the apparatus, however, the limitation concerning the combination with the irrigation system is also positively recited. Applicant is required to clarify whether claim is

drawn to the subcombination or the combination and to amend the claim to be consistent with the intent. As to treating the claim on the merits, the examiner is considering the claim to be drawn to the subcombination of the apparatus. If applicant considers the claim to be directed to the subcombination then language such as --wherein the apparatus is adapted to be disposed within an irrigation system-- should be used.

# Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 16-18 and 21-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence in view of Buchan et al and Pickens et al or Fredericks.

Lawrence discloses a dispenser comprising a tee connector 104; a cylinder 102/122 with a side surface having a plurality of openings 162; an upstream opening and downstream opening, see figure 1; and wherein the lower portion of the lower chamber is unobstructed over its entire length, except for the lower chamber having a bottom surface with a plurality of openings and a first electrically powered valve operably connected to the upstream opening and a second electrically powered valve operably connected to the downstream opening. Buchan et al discloses an apparatus comprising a dispenser having a tee connector 18 and cylinder 14 and a first valve 88 connected to the upstream opening and a second valve 96 connected to the downstream opening, and teaching the use of a solenoid valve(i.e. electrically powered valve) to

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control a valve, see col. 11, lines 20 and 21. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide electrically powered valves for the upstream and downstream openings of Lawrence, as taught by Buchan et al, since such a modification would facilitate maintenance on the dispenser by enabling the valves to both be shut of and remove the dispenser for cleaning or replacement of parts or for loading up tablets.

Pickens et al discloses a dispenser comprising a cylinder 40 with a bottom surface having a plurality of openings 47 and a side surface with as plurality of openings 49. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of openings in the bottom surface of the lower portion in the cylinder of Lawrence, as taught by Pickens et al, since with such a modification the mixing of the tablets with the water is facilitated and the concentration of the tablets mixing with the water can be controlled by changing the number, size and shape of the openings in the side and bottom surfaces.

Fredericks discloses a dispenser comprising a cylinder 20 connected to a fitting 38 with an upper chamber having a lower portion 32 with a bottom surface having a plurality of openings 34 and a plurality of openings 50 or 54 in the side surface, see figures 3-5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of openings in the bottom surface of the lower portion in the cylinder of Lawrence, as taught by Fredericks, since with such a modification the water entry into the cylinder is facilitated for mixing.

As to claims 17, 18 and 36, the connection means for the first and second valves to the tee connector, whether it is a reducer bushing or other coupling means is a matter of design choice depending on the size of the pipe and the tee connector.

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As to claim 23, note Figure 3 of Fredericks.

As to claims 26, 27, 33 and 37, with respect to applicant's statements of intended use, i.e. "disposed within an irrigation system", "operably connected to one or more sprinkler heads", "operably connected to at least a portion of an irrigation system" and "capable of replacing a master valve of an irrigation system", the device of Lawrence, is capable of performing applicant's intended use. Note Lawrence discloses in col. 3, lines 19 and 22 and 23, that the dispenser can be used in any system involving tablets or any tablet system and in col. 6, lines 66 and 67, where it can be used in any apparatus using stack of tablets for treating either fresh or waste water.

As to claims 29 and 34, the tee connector and cylinder are shown formed as a single piece, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the cylinder rigidly connected to the upper opening of the tee connector by gluing, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

9. Claims 21, 26, 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over King, Sr. '174 in view of Buchan et al.

King, Sr. '174 discloses a dispenser comprising a tee connector 50; a cylinder 51/52 with a side surface having a plurality of openings; an upstream opening and downstream opening, see figure 3; and wherein the lower portion of the lower chamber is unobstructed over its entire length, except for a first electrically powered valve operably connected to the upstream opening and a second electrically powered valve operably connected to the downstream opening. Buchan

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et al discloses an apparatus comprising a dispenser having a tee connector 18 and cylinder 14 and a first valve 88 connected to the upstream opening and a second valve 96 connected to the downstream opening, and teaching the use of a solenoid valve(i.e. electrically powered valve) to control a valve, see col. 11, lines 20 and 21. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide electrically powered valves for the upstream and downstream openings of King, Sr. '174, as taught by Buchan et al, since such a modification would facilitate maintenance on the dispenser by enabling the valves to both be shut of and remove the dispenser for cleaning or replacement of parts or for loading up tablets.

As to claim 26 and 27, with respect to applicant's statements of intended use, i.e. "disposed within an irrigation system" and "operably connected to one or more sprinkler heads", the device of King, Sr. '174, is capable of performing applicant's intended use.

## Response to Arguments

10. Applicant's arguments with respect to claims 16-18 and 21-37 have been considered but are most in view of the new grounds of rejection.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Womack discloses operably connecting a RPZ valve with an electrically controlled valve. McGrew, Jr., Horvath et al and Hoadley disclose dispensers with lower portions of the lower chamber being unobstructed over substantially their entire length.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Ganey whose telephone number is 571-272-4899. The examiner can normally be reached on 7:00-5:00; M, Tu, W and Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjg 10/29/07

STEVEN J. GANEY PRIMARY EXAMINER

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